

# Missouri Department of Natural Resources

# **Total Maximum Daily Load Information Sheet**

# **Turkey Creek**

# Water Body Segment at a Glance:

County: Boone
Nearby City: Ashland
Water Body ID: 751
Segment Length: 6.3 miles

Watershed Size: 0.3 nines 21.7 square miles

Pollutant: Bacteria Source: Unknown



**Scheduled for TMDL development: 2016** 

# **Description of the Problem**

### **Designated beneficial uses of Turkey Creek**

- Livestock and Wildlife Watering
- Protection of Warm Water Aquatic Life
- Protection of Human Health (Fish Consumption)
- Whole Body Contact Recreation Category A

### Uses that are impaired

• Whole Body Contact Recreation – Category A

### Standards that apply

• Missouri's Water Quality Standards at 10 CSR 20-7.031(4)(C) states that for waters designated for whole body contact recreation category A, the *E. coli* bacteria count, measured as a geometric mean, shall not exceed 126 colonies per 100 milliliters of water during the recreational season. The recreational season is defined as being from April 1to October 31.

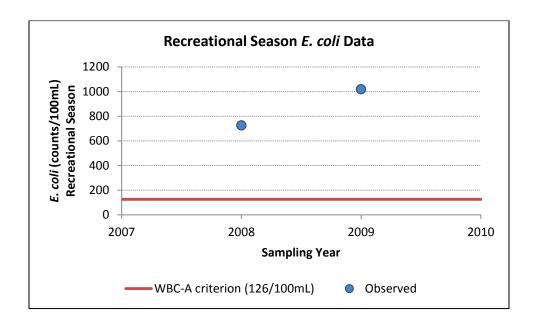
### Background information and water quality data

Turkey Creek is located northwest of Ashland and is a tributary to Bonne Femme Creek. Turkey Creek is designated for category A whole body contact recreation use and was first listed as impaired by bacteria on the state's 2012 303(d) List of impaired waters, which was approved in whole by the U.S. Environmental Protection Agency on Nov. 13, 2012.

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The department judges a stream to be impaired by bacteria if the water quality criterion for *E. coli* is exceeded in any of the last three years for which there is adequate data (minimum of five samples taken during the recreational season). High counts of *E. coli* are an indication of fecal contamination and an increased risk of pathogen-induced illness to humans. *E. coli* are bacteria found in the intestines of warm-blooded animals and are used as indicators of the risk of waterborne disease from pathogenic (disease causing) bacteria or viruses. Missouri's whole body contact bacteria criteria are based on specific levels of risk of acute gastrointestinal illness. The level of risk correlating to the category A criterion is no more than 8 illnesses per 1,000 swimmers in fresh water (0.8 percent).

Sufficient recreational season *E. coli* data to assess Turkey Creek was collected in 2008 and 2009. The geometric mean of this data exceeded the whole body contact category A criterion during both years. For this reason, Turkey Creek has been assessed as impaired by *E. coli*.



# Columbia W E AB S Legend Impaired Segment Stream Stream Stream Municipal Area W 1000 Municipal Area Municipal Area Miles

## **Map Showing the Turkey Creek Watershed**

### **NOTE:**

The final Turkey Creek TMDL will use the most recent and available data and information.

### For more information call or write:

Missouri Department of Natural Resources Water Protection Program P.O. Box 176, Jefferson City, MO 65102-0176 1-800-361-4827 or 573-751-1300 office 573-526-6802 fax

Program Home Page: dnr.mo.gov/env/wpp/index.html

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